## **REMARKS**

In the Office Action, the Examiner rejected claim 10 under 35 U.S.C. § 112, second paragraph; rejected claims 1-3, 5, 7, 8, and 11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,737,790 to Skeie et al.; rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Skeie et al. in view of U.S. Patent No. 6,346,922 to Proctor et al.; rejected claims 6 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Skeie et al. in view of U.S. Patent No. 5,952,922 to Schober and U.S. Patent No. 5,861,848 to Iwasaki; and rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Skeie et al. in view of Iwasaki and further in view of Proctor et al.

Applicants have amended claims 1-10 to improve readability. Claims 1-11 are pending in the above-captioned patent application.

Applicants respectfully traverse the Examiner's rejection of claim 10 under 35 U.S.C. § 112, second paragraph. However, in order to expedite prosecution of the present application, Applicants have amended claim 10 to depend from claim 8, as suggested by the Examiner at page 2 of the Office Action. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claim 10 under 35 U.S.C. § 112, second paragraph.

Applicants respectfully traverse the Examiner's rejection of claims 1-3, 5, 7, 8, and 11 under 35 U.S.C. § 102(b) as being anticipated by to <u>Skeie et al</u>. In order to properly anticipate Applicants' claimed invention under 35 U.S.C. §102, each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Furthermore, "[t]he identical

invention must be shown in as complete detail as is contained in the . . . claim." See M.P.E.P. §2131 (8th ed., Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131 (8th ed., 2001), p. 2100-69.

Claim 1, for example, is not anticipated by <u>Skeie et al.</u> because the reference fails to teach each and every element of the claim. In particular, <u>Skeie et al</u> fails to disclose at least the claimed combination including an *antenna impedance* having "impedance characteristics for developing first and second voltage maxima across the input at first and second frequencies respectively, thereby providing a continuous operative frequency band for the transponder including the first and second frequencies."

The Examiner contends that Fig. 14 of Skeie et al. discloses the claimed antenna impedance. Applicants respectfully disagree. Fig. 14 of the reference illustrates the "coupling response of the *transducer* of FIG. 13" (emphasis added, col. 12, lines 67-68). The transducer shown in Fig. 13 of Skeie et al. is a surface acoustic wave (SAW) device (col. 12, lines 35-39; col. 12, lines 48-51). As further shown in Fig. 8, each SAW device 126, 128 and 130, for example, is a different and separate component than antenna 156, which, according to the Examiner, corresponds to the claimed antenna (see Office action at page 3). The, SAW transducers disclosed in Skeie et al., therefore, do not constitute an antenna, and the coupling response shown in Fig. 14 of such transducers does not teach the claimed antenna impedance characteristics "for developing first and second voltage maxima across the input at first and second frequencies respectively,

thereby providing a continuous operative frequency band for the transponder including the first and second frequencies."

Moreover, the equivalent transponder circuit shown in Fig. 17 of Skeie et al. includes a single antenna capacitance C<sub>a</sub> and inductance L<sub>a</sub> and thus a single resonant frequency. In this respect, Skeie et al. teaches away from Applicants' claimed combination including an antenna impedance with impedance characteristics "for developing *first and second* voltage maxima", as recited in claim 1.

Claim 8 also recites an "antenna impedance" and impedance characteristics for developing "first and second voltage maxima at first and second frequencies," and is therefore similar to claim 1 in this respect. Claim 8, therefore, is distinguishable over <a href="Skeie et al.">Skeie et al.</a> at least for reasons discussed in regard to claim 1.

In light of the above-described deficiencies of <u>Skeie et al.</u>, claims 1 and 8 are allowable over the applied reference. Moreover, claims 2, 3, 5 and 7 are allowable at least due to their dependence from claim 1, and claim 11 is allowable at least due to its dependence from claim 8.

Applicants respectfully traverse the Examiner's rejection of claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Skeie et al. in view of Proctor et al.; and the rejection of claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Skeie et al. in view of Iwasaki and further in view of Proctor et al. In addition to failing to teach or suggest each and every element of claims 4 and 10, Proctor et al. does not constitute prior art under 35 U.S.C. § 102(e), and thus, the rejections of claims 4 and 10 based upon the above-identified combination of references including Proctor et al. should be withdrawn.

In particular, pursuant to 35 U.S.C. § 102(e):

A person shall be entitled to a patent unless -...

(e) the invention was described in ...(2)a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent

The cover of <u>Proctor et al.</u> names the following as inventors: David Edwin Proctor, Christopher Gordon Gervase Turner, and Andries Petrus Cronje Fourie. These are the same inventors identified in the declaration of the present application. Thus, the present application and <u>Proctor et al.</u> have the same inventive entity, and <u>Proctor et al.</u> is not by "another". Accordingly, although the filing date of <u>Proctor et al.</u> is before Applicants' U.S. filing date, it does not qualify as prior art under 35 U.S.C. § 102(e). Applicants respectfully submit that the Examiner's assertions otherwise at pages 6 and 8 of the Office Action are misplaced.

Applicants respectfully traverse the Examiner's rejection of claims 6 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Skeie et al. in view of Schober and Iwasaki. Applicants note that in order to establish a prima facie case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim elements. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Third, there must be a reasonable expectation of success. See M.P.E.P. § 2143.

In formulating the rejection of claims 6 and 9, the Examiner alleges that "Schober suggests using patch and loop antennas" (Office Action at page 7) while "Iwasaki suggests using a short-circuit ring patch antenna" (Office Action at pages 7-8).

Applicants respectfully submit, however, that even if <u>Schober</u> and <u>Iwasaki</u> were

combinable in the manner proposed by the Examiner (and Applicants disagree that they

are), the resulting combination of references would fail to overcome the above-noted

shortcomings of Skeie et al. Claims 6 and 9, therefore, are allowable at least due to

their dependence from claims 1 and 8, respectively.

In making the various references to the specification set forth herein, it is to be

understood that Applicants are in no way intending to limit the scope of the claims to the

exemplary embodiments shown in the drawings and described in the Specification.

Rather, Applicants expressly affirm that they are entitled to have the claims interpreted

broadly, to the maximum extent permitted by statute, regulation and applicable case

law.

In view of the above remarks, Applicants respectfully request reconsideration

and withdrawal of the rejections under §§ 102 and 103(a) and allowance of this

application.

Please grant any extensions of time required to enter this response and charge

any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: